REMARKS

Re-examination and allowance of the present application is respectfully requested.

Initially, Applicants thank the Examiner for considering the relevancy of all the documents cited in the Information Disclosure Statements filed on October 5, 2006; November 13, 2008; and December 9, 2008.

In the Office Action, claims 12-15 stand rejected under 35 U.S.C. §101 as being directed to non-statutory subject matter. By the current amendment, Applicants amend method claims 12 and 13 and program claims 14 and 15 to clarify each paragraph of the respective claims, clarifying that the claimed invention is not implemented by software and is within a statutory class. Accordingly, the Examiner is respectfully requested to withdraw the 35 U.S.C. §101 rejection of claims 12-15.

Applicants respectfully traverse the 35 U.S.C. §103(a) rejection of claims 10-15 as being obvious over U.S. Patent 5,502,789 to AKAGIRI in view of U.S. Patent 6,990,443 to ABE et al.

According to a feature of the claimed invention, auditory masking characteristic values from voice and musical tone signals are found, and, upon vector quantization, a method of distance calculation on a per vector element basis is changed, according to the auditory masking characteristic values. See, for example, paragraphs [0097] to [0116] of Applicants' specification and Fig.6 of the drawings.

In rejecting the claims, the Office Action acknowledges that AKAGIRI fails to disclose voice and musical tone coding. However, the Office Action asserts that column 14, line 50 to column 15, line 6 of ABE et al. teaches the computation of distance. Applicants respectfully disagree.

ABE et al. disclose a configuration that receives characteristic vectors as input, classifies

the type of an input signal from a characteristic vector X, calculates a characteristic vector Y from the characteristic vector X, and performs vector quantization of the new characteristic vector. In rejecting the claims, the Office Action asserts that ABE et al. discloses a configuration for changing the method of distance calculation. Applicants respectfully traverse this assertion.

Applicants submit that ABE et al. is directed to a method of classifying signals, whereby input signals are classified based on characteristics of the input signals. That is, the signals are classified based on whether the input signals contain speech, music, noise, etc. Further, ABE et al. discloses using, for the method of classification, a vector quantization for all vector elements. In other words, Applicants submit that ABE et al. is not directed to changing the method of distance calculation upon vector quantization on a per vector element basis. Accordingly, Applicants submit that ABE et al. fails to provide any disclosure (or even a suggestion) of changing the method of distance calculation upon vector quantization on a per vector element basis.

Applicants also submit (which the Office Action has acknowledged) that AKAGIRI fails to disclose (or suggest) that which is lacking in ABE et al.; namely, a vector quantization method of changing the method of distance calculation according to auditory masking characteristic values.

In view of the above, Applicants submit that even if one attempted to combine the references in the manner suggested by the Examiner, one would fail to arrive at the presently claimed invention, as such a combination would at least fail to include a vector quantization method of changing a method of calculating a distance according to auditory masking characteristic values. Accordingly, Applicants respectfully submit that the invention as defined by the amended claims is non-obvious over the combination of AKAGIRI and ABE et al., and

requests withdrawal of the 35 U.S.C. §103 rejection of the pending claims, along with an indication of allowability of claims 10-15.

While reviewing the specification of the above-captioned application, Applicants noted that wrong equations were associated with Equations 27-35. Specifically, the equation listed as "Equation 27" should really be listed as "Equation 28". Similarly, "Equation 28" should be listed as "Equation 29", through "Equation 34" that should have been listed as "Equation 35". Applicants submit that this typographic error is easily detected from reviewing the discussion of the various paragraphs of the application at paragraphs [0107] through [0124] of the specification of the present application. Thus, Applicants submit that no prohibited new matter is added by the submitted corrections.
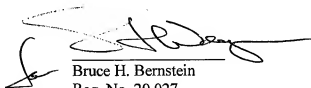
SUMMARY AND CONCLUSION

In view of the fact that none of the art of record, whether considered alone or in combination, discloses or suggests the present invention as now defined by the pending claims, and in further view of the above amendments and remarks, reconsideration of the Examiner's action and allowance of the present application are respectfully requested and are believed to be appropriate.

Should the Commissioner determine that an extension of time is required in order to render this response timely and/or complete, a formal request for an extension of time, under 37 C.F.R. §1.136(a), is herewith made in an amount equal to the time period required to render this response timely and/or complete. The Commissioner is authorized to charge any required extension of time fee under 37 C.F.R. §1.17 to Deposit Account No. 19-0089.

If there should be any questions concerning this application, the Examiner is requested to contact the undersigned at the telephone number listed below.

Respectfully submitted,
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